
IM-1 MILLION
IN A

MARCH 1983

PAGE 1

HOWDY FOLKS. WELL HERE WE ARE AGAIN. I HOPE THAT EVERYBODY LIKES WHAT THEY HAVE SEEN SO FAR IM FAR FAR FAR

TO START WITH I NEED TO CORRECT THE WAY THAT WE ARE DOING SOMETHING. IT IS THE TAPES THAT WE WILL BUILD FOR THE MEMBERS, I HAVE DIVIDED THEM DOWN INTO GROUPS OF 5 AND FOR THE ONE CHARGE YOU CAN PICK ANY 2 OF THE GROUPS PER TAPE THAT YOU ORDER. THE WORK BEHIND PUTTING EACH PROGRAM ON THE TAPE ONE AT A TIME WAS KILLING ME. I HOPE THAT THIS IS SATISFACTORY.

ANOTHER THING TO THE MEMBERS, MOST OF THESE PROGRAMS ARE WRITTEN BY BEGINNING PROGRAMMERS AND ARE VERY GOOD, BUT FOR ANYBODY TO EXPECT THEM TO BE PERFECT IS A LITTLE TOO MUCH. WE TRY TO CORRECT ANY OBVIOUS PROBLEMS BUT WE CANNOT GUARENTEE THE LOGIC OF EACH PROGRAM. MOST OF THEM JUST GIVE YOU A GOOD BASE TO START FROM.

SOMEMORE REAL GOOD NEWS. THIS LETTER IS BEING DONE USING THE NEW LEVEL II BASIC BY MR. RECKER. IT IS DUE OUT REAL SOON.

OK ON TO THE OTHER STUFF, IN THIS ISSUE WE ARE GOING TO TRY AND ANSWER AS MANY OF THE QUESTIONS AS WE CAN THAT WE HAVE RECEIVED. THEY SHOULD BE VERY HELPFUL FOR THE NEW MEMBERS AND SOME OF THE OLD MEMBERS MIGHT LEARN SOMETHING.

*****DOOF CORRECTION TIME*****
FROM ELAINE HOM AND JOSEPH MIRABITO
HERE ARE SEVERAL CORRECTIONS FOR THE PROGRAMMING AND TECHNICAL REFERENCE MANUAL.

IN CHAPTER VII PAGE 7

1. \$855D	34141	ROUTINE TO SAVE MEMORY
2. \$85B4	3422B	ROUTINE TO READ TAPE
3. \$A1E6	41446	END OF MEMORY

THANKS FOR THE CORRECTIONS**

I WOULD LIKE TO ACKNOWLEDGE THE FACT THAT LOUIS BOLDUC SENT IN THE SUBGESTION ABOUT THE DISC DRIVE MOTOR THING AT THE SAME TIME THAT WE WENT TO THE PRINTER WITH THE FEB NEWSLETTER. SINCE THEN HE HAS SENT IN SOME INFORMATION EXPLAINING HOW THE DISC PROGRAM WORKS. IT IS QUITE LENGTHY AND WE WILL PUBLISH IT AS SPACE ALLOWS. I HAVE READ IT AND IT SEEMS TO BE A VERY ACCURATE DESCRIPTION OF THE WAY THE DOS FUNCTIONS. IF ANYBODY WANTS ADVANCE COPIES (9 PAGES) SEND A STAMPED SELF ADDRESSED ENVELOPE TO THE CLUB WITH \$2.00 TO COVER THE COST OF PRINTING. I WILL TRY TO PUBLISH PARTS OF IT AS SPACE ALLOWS.

ATTENTION YOU HAMS OUT THERE

FROM GARY E. SHELTON

THE GIANT HANDBOOK OF COMPUTER PROJECTS BY THE EDITORS OF '73' MAGAZINE, THIS BOOK HAS A LOT OF PROJECTS CONCERNING HAM AND PERSONNEL COMPUTERS. HE SAYS THAT IT CONTAINS LOTS OF PROJECTS FOR YOU.

IT IS BOOK #1149 AND COSTS \$18.95.....

THESE ARE SOLD AT THE LARGER BOOK STORES.!!!!!!LET ME KNOW WHAT YOU THINK!!!!!!

FROM JEFFREY A. ROSTON

I HAVE A RADIO SHACK LINE PRINTER VII WITH AN AUTOMATIC LINE FEED THAT CAN'T BE DISABLED. AS A RESULT I GET 2 LINE FEEDS WITH EACH LINE. HOW DO I STOP IT?

ANSWER: FOR THE 'LIST' THERE IS NOTHING HE CAN DO. FOR THE 'PRINT' THE ONLY EASY WAY TO GET RID OF THIS IS TO END YOUR PRINT STATEMENTS WITH ";" AND PUT IN CHR\$(10) FOR LINE FEED AND CHR\$(13) FOR CARRIAGE RETURNS. THE PROBLEM IS THAT THE R.S. PRINTER DOES A LINE FEED WITH EACH CARRIAGE RETURN AND THE IM-1 PUTS OUT BOTH A CR & LF. THE ";" AT THE END OF THE 'PRINT' WILL STOP IT.

FROM GARY NEPERUD

COULD YOU TELL ME HOW I CAN GET THE HIGH RESOLUTION GRAPHICS?

ANSWER: IN ONE LETTER NO. WE DON'T HAVE THAT MUCH ROOM. IN THE FIRST 2 ISSUES WERE A COUPLE OF GOOD PROGRAMS TO USE AS LEARNING AIDS FOR HI RES. WE HOPE TO GO INTO IT IN GREATER DETAIL LATER.

FROM JIM KISSOCK

1. WHAT IS THE BB-1 INTERFACE USED FOR??

ANSWER: THIS IS A UNIT WHICH IS USED TO PHYSICALLY AND ELECTRICALLY CONNECT THE FOLLOWING TO THE IM-1.

SI-232=PRINTER OR MODEM INTERFACE

FI-100=FLOPPY DISC DRIVE INTERFACE

8K RAM-MEMORY EXPANSION

2. WHAT IS THE IM-150 MODEM COMPATIBLE WITH?

ANSWER: THE IM-150 USES A VERY COMMON METHOD OF COMMUNICATING SO IT IS COMPATIBLE WITH ALMOST ALL OF THE ASYNC MODEMS.

3. WOULD WE NEED A PROGRAM IN THE IM-1 TO USE THE MODEM??

ANSWER: YES, THE IM-1 REQUIRES A SMALL PROGRAM TO COMMUNICATE WITH OTHER COMPUTERS.

4. HAS ANYONE USED A QKIDATA MICROLIN 82 OR 83 WITH THE APF?

ANSWER: YES

5. HOW MUCH MORE POWERFUL WOULD THE FLOPPY DISC DRIVE MAKE MY SYSTEM??

ANSWER: QUITE A BIT. IT SPEEDS UP THE LOADING OF PROGRAMS AND STORING OF DATA PLUS ALLOWS LARGER AMOUNTS OF DATA TO BE STORED.

6. WHAT ARE YOU USING TO PRODUCE THE NEWSLETTER??

ANSWER: RIGHT NOW WE ARE USING A PROGRAM WRITTEN BY GLENN JONES. FOR A PRINTER WE HAVE A EPSON MX-80....

FROM DONALD HILTS

1. HOW DOES THE REVERSE VIDEO WORK? I HAVE TRIED IT AND ALL I GET IS THE NORMAL CHARACTERS.

ANSWER: I THINK THE EASY WAY TO EXPLAIN THIS IS WITH THIS TEST PROGRAM TO SHOW YOU WHAT HAPPENS.

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10 DIM A$(20)
100 FOR I = 0 TO 3
200 INPUT A$
300 NEXT I
400 IF KEY$(0)<>" THEN POKE $193,60: GOTO 400
500 POKE $193,52: GOTO 400

```

AT THE INPUT COMMAND KEY IN ANYTHING, IT WILL LET YOU KEY IN 4 LINES AND THEN IT WILL LOOK AT THE KEYBOARD AND IF ANY KEY IS DEPRESSED IT WILL DO THE REVERSE VIDEO AND PUT IT BACK TO NORMAL WHEN KEY IS RELEASED.

FROM JOHN MUSLER JR

I WOULD LIKE TO LOAD SEVERAL PROGRAMS ON ONE CASSETTE TAPE. I TRIED TO DESIGNATE EACH ONE BY CLOAD 'A', ETC. THIS DID NOT WORK IS THERE A WAY TO PERFORM THIS OPERATION??

ANSWER: AT THIS TIME I DON'T KNOW OF A WAY TO DO IT UNLESS YOU WANT TO WRITE A SPECIAL MACHINE LANGUAGE PROGRAM AND PUT IT IN THE UNUSED PORTION OF DISPLAY MEMORY AND USE IT TO LOAD THE PROGRAMS. THE EASIEST WAY IS JUST RECORD WHAT THE TAPE COUNTER IS AT AND USE IT TO POSITION THE TAPE.

****IF ANY MEMBERS HAVE ANYTHING ALONG THESE LINES LET ME KNOW AND I WILL LET EVERYBODY KNOW****

FROM WESLEY DUKE

HOW DO YOU COPY YOUR PROGRAMS FOR BACKUP WITHOUT THE CSAVE STATEMENTS BEING ON THE SCREEN WHEN THEY ARE RLOADED???

ANSWER: THIS ONE WILL BE A LITTLE TRICKY, I HOPE YOU CAN FOLLOW MY EXPLANATION. A LOT OF WHAT YOU WILL BE DOING WILL NOT BE DISPLAYED ON THE SCREEN SO YOU WILL BE WORKING IN THE BLIND.

STEP 1. PLACE TAPE TO BE COPIED IN THE TAPE DECK.
STEP 2. POKE \$B960,255 AT THIS TIME THE CURSOR WILL DISAPPEAR
STEP 3. HOLD THE CTRL KEY AND HIT THE RETURN KEY ONCE.
STEP 4. RELEASE THE CTRL KEY AND HIT THE RETURN KEY ONCE.
THE AUDIO OF THE TAPE DECK SHOULD TURN ON NOW.

STEP 5. PRESS PLAY ON THE TAPE DECK AND SEE IF TAPE STARTS MOVING. NOW WHEN YOU EITHER HEAR THE TONE AT THE BEGINNING OR THE COMMAND FROM THE TAPE TO 'HIT RETURN' HIT THE RETURN KEY. AT THIS POINT YOU SHOULD START LOADING THE PROGRAM FROM TAPE. THE ONLY WAY TO TELL WHEN IT IS DONE IS WHEN THE COUNTER STOPS. THERE WILL NOT BE AN 'OK' ON THE SCREEN.

STEP 6. REMIND YOUR TAPE AND PUT THE BACKUP TAPE IN WITH IT IN THE PROPER POSITION.

STEP 7. HOLD DOWN THE 'CTRL' KEY AND HIT THE 'LINE FEED' KEY ONCE.

STEP 8. RELEASE THE 'CTRL' KEY AND HIT THE 'RETURN' KEY ONCE.

STEP 9. PRESS PLAY AND SEE IF COUNTER STARTS MOVING IF IT DOES HIT 'RETURN' ONCE AND THE PROGRAM SHOULD START WRITING TO TAPE. YOU SHOULD HEAR THE INCREASED AUDIO SOUND.

YOU WILL KNOW IT IS DONE WHEN THE TAPE STOPS MOVING. THIS MIGHT REQUIRE SOME PRACTICE BEFORE YOU GET THE PROCEDURE RIGHT.

HEY FOLKS I AM OUT OF QUESTIONS
FOR NOW BUT KEEP THEM COMING.

 HERE IS THE BEGINNING OF THE INFORMATION FROM **LOUIS BOLDUC**
 BEFORE ANY EXPLANATION, HERE ARE A FEW DEFINITIONS:

- 1-A DISKETTE CONTAINS 34 TRACKS, THEY ARE NUMBERED FROM 0 TO 33 AND EACH TRACK CONTAINS 8 SECTORS, NUMBERED FROM 1 TO 8.
- 2-GAT 1GRANULES ALLOCATION TABLE. A GRANULE IS THE MINIMUM ALLOCATABLE UNIT OF STORAGE FOR ANY FILE. IN THE TMSDOS, ONE GRANULE IS 3 SECTORS LONG. ON THE APP. 11 IS ONE SECTOR. THE GAT IS LOCATED ON TRACK ZERO, SECTOR ONE.
- 3-FSAT 1FILE'S SECTORS ALLOCATION TABLE. THIS TABLE IS USED TO INDICATE THE SECTORS USED BY THE FILE. THERE IS ONE FSAT FOR EACH FILE. THE GAT, INDICATES THE FREE SECTORS ON THE DISKETTE
- 4-DIRECTORY 1CONTAINS THE FCB OF EACH FILE ON THE DISKETTE. IT IS LOCAT 1 ON TRACK ZERO, SECTOR TWO.
- 5-FCB 1FILE CONTROL BLOCK. THERE IS ONE FCB FOR EACH FILE. IT IS 16 BYTES LONG AND IT CONTAINS THE INFORMATION REQUIRED TO HAVE ACCESS TO A FILE. EACH FCB IS DEFINED AS FOLLOWS:

FILENAME/20(HEX)/FSAT TRACK/FSAT SECTOR/FILE TYPE/NOT USED
7 BYTES 1 BYTE 1 BYTE 1 BYTE 1 BYTE 5 BYTES

BYTE 0 IS ALWAYS SET TO 20 HEX AND THE LAST 5 BYTES ARE ALWAYS SET TO ZERO. FILE TYPE IS EITHER S,I,D,A,F. SINCE THE DIRECTORY IS ONE SECTOR LONG (256 BYTES) AND ONE FCB IS 16 BYTES LONG, YOU CAN UNDERSTAND EASILY WHY THE FILE LIMIT IS 16.

**TO BE CONTINUED IN THE NEXT
 EXCITING ISSUE ! ! ! ! ! ! ! ! ! !**

*****BASIC BOX*****

HERE ARE SOME MORE OF THE MORE CONFUSING BASIC COMMANDS.

1. **ABS(X)** = THE ABSOLUTE VALUE OF 'X' IS CALCULATED. THIS COMMAND IS USED TO MAKE SURE A VALUE IS NOT A NEGATIVE VALUE.

EXAMPLE: ABS(-1.2) = 1.2
 ABS(0) = 0
 ABS(1.45) = 1.45

2. **INT(X)** = IT RETURNS JUST THE INTEGER (WHOLE NUMBER) VALUE OF 'X'. IT IS USED TO DROP OFF THE FRACTIONAL PORTION OF A VARIABLE OR NUMBER. THE 'INT' COMMAND DOES NOT ROUND NUMBERS OFF IT JUST DROPS THE FRACTIONAL PORTION.

EXAMPLE: INT(12.45) = 12
 INT(-1) = -1
 INT(0) = 0

EXAMPLE PROGRAM USING BOTH 'ABS' AND 'INT'

```
10 X=-1.333
20 PRINT X,INT(X),ABS(X)
PRINT OUT =    -1.333    -1    1.333
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1 REM SPACE DUEL SUBMITTED BY DON BELTS
2 CALL 1794: POKE 24575,54
3 DIM X(9),Y(9)
4 DIM X(10),Y(10)
5 X=52:Y=559
6 REM INSTRUCTIONS
7 PRINT "++++SPACE DUEL++++": PRINT
8 PRINT " 1& 121:"THE OBJECT OF THE GAME IS TO DESTROY YOUR OPPONENT BEFORE HE DESTROYS YOU.": PRINT
9 PRINT " 2& 122:"EACH PLAYER TAKES TURNS TAKING ONE MOVE PER TURN.": PRINT
10 INPUT "RIGHT PLAYER",R: PRINT
11 INPUT "LEFT PLAYER",L: PRINT
12 FOR T=1 TO 1500: NEXT T
13 POKE 819,48: POKE 819,559
14 REM SET UP SHAPE "R"
15 FOR A=512 TO 516: POKE A,R: NEXT A: POKE 517,58: POKE 518,55: POKE 519,55: POKE 521,55: POKE 522,55: POKE 523,55
16 FOR B=524 TO 527: POKE B,R: NEXT B
17 REM SET UP SHAPE "I"
18 FOR C=529 TO 535: POKE C,I: NEXT C: POKE 536,55: FOR D=537 TO 543: POKE D,I: NEXT D
19 REM SET UP SHAPE "2"
20 FOR A=544 TO 550: POKE A,I: NEXT A
21 REM SET UP SHAPE "3"
22 FOR A=561 TO 570: POKE A,I: NEXT A
23 REM SET UP SHAPE "4"
24 FOR A=571 TO 579: POKE A,I: NEXT A: POKE 580,18: POKE 581,12: POKE 582,245: POKE 583,68: POKE 584,287: POKE 585,243: POKE 586,25
25
26 FOR D=587 TO 599: POKE D,R: NEXT D
27 REM SET UP SCREEN
28 POKE X,64: POKE Y,64: FOR D=0 TO 32: POKE X,67: NEXT D: FOR T=34 TO 349: POKE T,67: NEXT T: FOR U=351 TO 383: POKE U,67: NEXT U
29 REM START "R" MOVEMENTS
30 IF Y=0 THEN 328
31 R=KEYS(4)
32 IF X="R" THEN D=0-32: POKE X,64: POKE X+32,67: CALL 1794: GOTO 229
33 IF D="S" THEN X=X+32: POKE X,64: POKE X-32,67: CALL 1794: GOTO 229
34 IF X="E" THEN D=X+1: POKE X,64: POKE X-1,67: CALL 1794: GOTO 229
35 IF D="W" THEN X=X-1: POKE X,64: POKE X+1,67: CALL 1794: GOTO 229
36 IF D="S" THEN GOTO 179
37 IF D="E" THEN E=INT (RND (81818+11432): GOTO 175
38 IF D="W" THEN E=INT (RND (81818+11432): GOTO 185
39 IF D="N" THEN D=INT (RND (814281+3): GOTO 195
40 IF D="S" THEN E=INT (RND (814281+3): GOTO 205
41 IF D="W" THEN W=
42 GOTO 229
43 POKE X,67: E=INT (RND (814383+11): CALL 1794: CALL 1794: CALL 1794: POKE X,64: GOTO 229
44 X=X-64: E=E-1: FOR F=X TO E STEP -32: IF F=Y THEN 349
45 POKE F,66: POKE F+32,67: NEXT F: POKE F+32,67: CALL 1793: X=X+64: GOTO 229
46 X=X+64: E=E+64: FOR F=E TO E STEP 32: IF F=Y THEN 349
47 POKE F,66: POKE F-32,67: NEXT F: POKE F-32,67: CALL 1793: X=X-64: GOTO 229
48 X=X-64: E=E-1: FOR F=X TO E STEP -32: IF F=Y THEN 349
49 POKE F,66: POKE F+1,67: NEXT F: POKE F+1,67: CALL 1782: X=X+2: GOTO 229
50 X=X+2: E=E+2: FOR F=X TO E: IF F=Y THEN 349
51 POKE F,66: POKE F-1,67: NEXT F: POKE F-1,67: CALL 1782: X=X-2: GOTO 229
52 REM START "I" MOVEMENTS
53 IF X=0 THEN 328
54 X=KEYS(4)
55 IF Y="W" THEN Y=Y-32: POKE Y,64: POKE Y+32,67: CALL 1794: GOTO 198
56 IF Y="S" THEN Y=Y+32: POKE Y,64: POKE Y-32,67: CALL 1794: GOTO 198
57 IF Y="E" THEN X=X+1: POKE Y,64: POKE Y-1,67: CALL 1794: GOTO 198
58 IF D="W" THEN Y=Y-1: POKE Y,64: POKE Y+1,67: CALL 1794: GOTO 198
59 IF Y="S" THEN 258
60 IF Y="N" THEN D=INT (RND (81818+11432): GOTO 259
61 IF D="E" THEN E=INT (RND (81818+11432): GOTO 269

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205 IF Y0=0 THEN G= INT ( RND (0.1230)+3: GOTO 110
270 IF Y0=0 THEN G= INT ( RND (0.1230)+3: GOTO 330
275 IF Y0=0 THEN G=
277 GOTO 110
280 POKE Y,67:Y= INT ( RND (0.1230)+1: CALL 17000: CALL 17000: CALL 17000: POKE Y,64: GOTO 110
290 Y=Y-2:G=Y-G: FOR H=0 TO 5 STEP -1: IF H=0 THEN 390
295 POKE H,66: POKE H+32,67: NEXT H: POKE H+32,67: CALL 17020:Y=Y+4: GOTO 110
300 Y=Y+1:G=Y-G: FOR H=Y TO 6 STEP 1: IF H=1 THEN 390
305 POKE H,66: POKE H-32,67: NEXT H: POKE H-32,67: CALL 17020:Y=Y-4: GOTO 110
310 Y=Y-2:G=Y-G: FOR H=0 TO 5 STEP -1: IF H=0 THEN 390
315 POKE H,65: POKE H+1,67: NEXT H: POKE H+1,67: CALL 17020:Y=Y+2: GOTO 110
320 Y=Y+2:G=Y-G: FOR H=0 TO 6: IF H=1 THEN 390
325 POKE H,65: POKE H-1,67: NEXT H: POKE H-1,67: CALL 17020:Y=Y-2: GOTO 110
330 POKE X,67: POKE X,60: MUSIC "100000-000000": FOR T=1 TO 300: NEXT T: POKE X,67
340 POKE 8093,52: POKE 8094,10: CALL 17040
350 PRINT "YOU HAVE COLLIDED.... YOU ARE BOTH DESTROYED!!!!": STOP
360 POKE X,60: POKE Y+1,67: POKE X-1,67: POKE Y+32,67: POKE Y-32,67: MUSIC "10000-70000": FOR T=1 TO 300: NEXT T: POKE X,67
370 POKE 8193,52: POKE 8194,50: CALL 17040
380 PRINT "GOOD JOB ";R0;" YOU HAVE DESTROYED ";L0;"!": STOP
390 POKE X,64: POKE X+1,67: POKE X-1,67: POKE X+32,67: POKE X-32,67: MUSIC "10000-70000": FOR T=1 TO 300: NEXT T: POKE X,67
400 POKE 8093,52: POKE 8094,10: CALL 17040
410 PRINT "VERY GOOD ";L0;" YOU HAVE KILLED ";R0;"!": STOP
5000 REM UP=MOVE MAN UP, DOWN=MOVE MAN DOWN, RIGHT=MOVE MAN RIGHT, LEFT=MOVE MAN LEFT
9010 REM 0=TO FIRE DOWN, 4=TO FIRE LEFT, 6=TO FIRE RIGHT, 8=TO FIRE UP, 5=HOPPER SPACE, CL=RESET GAME
9799 END

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8

3 REM AFF TAPE CATALOG — Submitted By Gary Beihold

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00 DIR M(10,04+51): POKE 24578,54
10 CALL 17010: GOSUB 90
20 FOR I=1 TO 9: READ B0
25 IF B0="EOF" THEN 50
30 PRINT B0: NEXT I
35 PRINT : PRINT "PRESS RETURN TO CONTINUE"
40 B0=KEY$ (0): IF B0="" THEN 40
45 GOTO 10
50 PRINT : PRINT "THE END -- WANT A PRINTOUT?"
55 B0=KEY$ (0): IF B0="" THEN 55
60 IF B0="Y" THEN STOP
65 PRINT "+: RESUME
70 GOSUB 90: PRINT
75 READ B0
80 IF B0="EOF" THEN PRINT "B: STOP
85 PRINT B0: GOTO 75
90 PRINT " A P F PROGRAM TAPE CATALOG "
95 PRINT "-----"
100 PRINT " NAME TYPE POSITION": RETURN
1010 DATA PROGRAM-FILES...CATLOGS.000-009
1015 DATA ARTISTREXEL...GRAPHIC.....
1020 DATA ..FILELOAD-RUN-GOTO10001..000-019
1025 DATA STAR-TREK.....GAME...020-029
1030 DATA MOON-LANDER.....GAME...030-039
1040 DATA EDSTOR.....PBM-ATS.040-049
1050 DATA BACK-UP.....PBM-ATS.050-059
1060 DATA SPACE-BESTROMERS.GAME...060-069
1070 DATA TYPING-TUTOR.....EDUC...070-079
1080 DATA MAILING-LIST.....BUSG...080-089
1090 DATA BILLBOARDS.....BUSG...090-099
1100 DATA PAC-MAN.....GAME...100-109
2000 REM ENTER NEW PROGRAMS RIGHT BEFORE THIS REMARK - ENTER31 CHARACTERS & DO NOT USE ANY BLANKS
2010 DATA EOF
2020 END

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1000 INPUT "NUMBER ",N
9999 REM  SORGE ROOT PROGRAM SUBMITTED BY DUANE DAVING
9010 IF N=0 THEN GO-TO 9100
9020 L=J=0
9030 S=0
9040 L=L+J+S=0
9050 IF S=0 THEN 9060
9060 S=1
9070 FOR PL=1 TO L
9080 S=S+J+S=0
9090 S=S: NEXT PL
9100 PRINT S

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1 REM 1040 A & B THE PROGRAM SUBMITTED BY KEITH PHILLIPS

2 PAGE 24570,14

3 CALL 27040

20 PRINT "1040,1040"

30 PRINT "MAGNITUDE LINE 7"

40 INPUT A

40 PRINT "INTEREST; LINE 8"

50 INPUT B

60 PRINT "CAP. GAIN/LOSS; LINE 14"

70 INPUT C

80 B=B+C

90 PRINT "TOT. INCOME; LINE 20",B

100 PRINT "AGG. GROSS, LINE 21",B

110 PRINT "TYPE 000-250 IF YOU ARE IDENTIFYING REDUCTIONS", "110 IF NOT" STOP

120 PRINT "IDENTIFIED NO. LINE 14",E

130 PRINT "IF YOU DO NOT IDENTIFY THEN ENTER A FOURTH OF YOUR CAP. CONTRIBUTIONS UP TO 400"

140 F=0-E

150 PRINT "LINE 20",F

160 PRINT "NUMBER OF EXEMPTS + 1000"

170 PRINT "LINE 27,3 EXEMPTS",F-1000

180 PRINT "CONVITE 100"

190 PRINT "TOT. FED. TAX 7040"

200 INPUT G

210 PRINT "100 TAX TABLE"

220 INPUT H

230 I=0-B

240 PRINT "HONK DUE, -WE/100",I

250 PRINT "SCHEDULE TYPE 000-100"

260 STOP

270 PRINT "SCHEDULE 000"

280 PRINT "MORTGAGE 000"

290 INPUT J

300 B=B+J

310 PRINT "SCHEDULE LINE 2",K

320 L=0-B

330 IF L=0 THEN L=0

340 PRINT "LINE 3",L

350 PRINT "TOT INS PREM"

360 INPUT M

370 PRINT "TOTAL MED ADENTAL"

380 INPUT N

390 B=B+N

400 F=B+J

310 B=B-P

320 IF B=0 THEN B=0

330 IF B=0 THEN PRINT "LINE 10",B

340 PRINT "LINE 0",B

350 PRINT "STATE/LOCAL TAXES"

360 INPUT N

370 PRINT "REAL ESTATE TAX"

380 INPUT O

390 PRINT "GEN. SALES TAX"

400 INPUT Z

410 PRINT "GROSS REG. FEE PERG. PROP. ETC."

420 INPUT Y

430 B=B+Y+Z

440 PRINT "LINE 20",B

450 PRINT "INTEREST EXPENSE"

460 INPUT V

470 PRINT "CHARITY"

480 INPUT W

500 PRINT "CAS. INC/TMISC. DER."

510 INPUT X

520 B=B+X+Y+Z

530 PRINT "LINE 20",Y

540 E=Y-1400

550 PRINT "TOT. DER. LINE 10",E

560 GO TO 110

570 PRINT "AGG GROSS",B

580 PRINT "MED. DER.",B

590 PRINT "TAXES",B

600 PRINT "INTEREST EXPENSE",B

610 PRINT "CHARITY",B

620 PRINT "CAS. WISE.",B

630 PRINT "TOT. ITEM. DER.",Y

640 PRINT "Y-1400, LINE 10",Y-1400

THIS IS THE END

CALL BOX CALL BOX CALL BOX

TO START WITH HERE ARE SOME MACHINE LANGUAGE ROUTINES AND INFO
SUBMITTED BY JOSEPH MIRABITO
THE FOLLOWING 2 ROUTINES ARE IN THE ROM OF THE MP100V.
17000 #0200 = THIS ROUTINE TOGLES THE OSCILLATOR
17004 #42AC = THIS ROUTINE GENERATES A PHASOR SOUND
THE FOLLOWING PROGRAMS ILLUSTRATE THE USE OF THESE ROUTINES.
THE FIRST PROGRAM GENERATES TONES BASED ON THE HEX VALUES IN
LOCATIONS #01F0 AND #01F1. THE FIRST LOCATION DETERMINES THE
PITCH, THE HIGHER THE VALUE THE FEWER THE OSCILLATIONS, AND THE
LOWER THE PITCH OF THE SOUND, THE SECOND VALUE, #01F1 DETERMINES
THE DURATION OF THE TONE.

ADDRESS	HL	ASSEMBLY
#01E0	001F0	AGAIN LOAN PITCH
#01E3	4A	WAIT DECA ;GET PITCH
#01E4	2AF0	ONE WAIT
#01E6	004200	JSR TOSBL
#01E9	7001F0	DEC DATN
#01EC	2AF0	BNE AGAIN ;NOT LONG ENOUGH, AGAIN
#01EE	3A	RTS ;RETURN TO BASIC

THIS NEXT ROUTINE GENERATES A PHASOR SOUND WHEN ANY KEY OF THE
ATTENT CONTROLLER IS PUSHED. SINCE THE DEBOUNCE IS NOT AS FINE ON
THE JOYSTICKS, A CONSTANT PHASOR SOUND IS PRODUCED WITH A JOY-
STICK MOVEMENT. THIS ROUTINE MUST BE EDITED BY A RESET AS IT IS
WRITTEN.

ADDRESS	HL	ASSEMBLY
#01E0	0042AC	JSR SOUND
#01E3	004309	INPUT JBR POSIT
#01E6	25F0	BDS PHASOR ;KEY CLOSURE MAKE SOUND
#01E9	2AF9	BCC INPUT ;NO KEY, CHECK AGAIN

THANKS FOR THE INFORMATION JOSEPH.....
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BOTH OF THE MACHINE LANGUAGE ROUTINES NEED A BASIC PROGRAM TO
MAKE IT EASIER TO RUN. KEY IN THE PROGRAM LIKE I LIST IT THEN
GO INTO MACHINE MONITOR AND PUT IN THE MACHINE LANGUAGE PORTION.
1 REM #####
2 REM THIS IS FOR THE FIRST ROUTINE
3 REM INPUT(TONE PITCH) TO 2551",P
4 REM INPUT(DURATION (1 TO 2551"),J
5 REM PITCH 49H,P;DUE 497,J
6 REM CALL 4200V
7 REM GOTO 10

1 REM #####
2 REM FOR SECOND ROUTINE
3 REM CALL 4200V

THESE TWO ROUTINES WILL GIVE THE PEOPLE THAT WANT TO LEARN HOW
TO KEY IN MACHINE LANGUAGE ROUTINES SOME GOOD PRACTICE. LUCK

MY FOLKS HERE IS A LIST OF
PROGRAMS THAT WE HAVE AVAILABLE
ON TAPE. WHEN ORDERING PLEASE
SPECIFY THE # THAT YOU WANT
ON YOUR TAPE FOR THE \$5.00.
THOMAS EDITOR

TAPE #1
CLEAR--FOR PROGRAM
#1 RES--#1 RES HELPER PROGRAM
#2 RES--#2 RES HELPER PROGRAM
RES-BEC--RES-BEC OR DEC-RES
MUSIC--FOR PROGRAM
TAPE #2
METRIC--METRIC A STAND. CONV.
SPECI--GAME PROGRAM IN ROMAN
#3 RES--#3 RES HELPER PROGRAM
DATATAP--USE CASSETTE FOR DATA
ACOM--TUNABLE THE HEAR OF #1'S
TAPE #3
BLACK--BLACKBOX GAME
CAPITAL--STATE CAPITAL ANSWERS
PHASOR--SIMPLE PUT GOOD GAME
LETTER--SIMPLE LETTER MACHINE
TV LOGO--DISPLAYS PICTURE
TAPE #4
MUSIC--GAME
BATTLE--GAME
SPRINT--VISUAL DISPLAY
TAPRAB--SIMPLE TAP PROGRAM
AUDIOTAP--AUDIO RECORDING PROG.
TAPE #5
IN CALL--WORD & MULTI PHASE. EX.
TUNETST--MAKES LOTS OF NOISE
LETTRAP--ANOTHER LETTER PROGRAM
BANKED--SIMPLE BANK BAL PROG
NOULETT--ANOTHER GAME
TAPE #6
BAILIT--CONVERTS BALD AND LOTS
RECIPES--RECIPE RECORD PROGRAM
MATH--MATH PROGRAM
STATRO--PLAYS A DISPLAY & JOY
ENGLISH--SIMPLE ENGLISH LESSON
TAPE #7
SHORE--ANOTHER GAME
ALPHAB--#1 RES ALPHAB CHARACTER
MUTEST--MURDER TEST PROGRAM
STABRE--LOTS OF FLUSH & POP
TAPE #8
JANARO--THE PROGRAM
FORECAST--FOR PROGRAM
SCREEN--SCREEN IMAGE PROGRAM
MATCHS--15 MATCHES,,,FOR
SO JOY--BASIC SO 2007
TAPE #9
SPACE--SPACE TELL GOOD
#2 RES--#2 RES HELPER PROGRAM
TAPCAT--TAP CATALOG PROGRAM

LONELY COMPUTERS



CLAY NANNING, 292 HODGKINS
ASTORIA, OR 97103

DWIGHT MORGEL, 1450 LAMORE DR
SAN JOSE, CALIF 95128
HIGHWAY OPERATOR ENG FOR STATE
OF CALIF. PROGRAMMING & INTERFACE
SINCE 1976. I HAVE EXTENSIVE
LIBRARY OF PROGRAMMING TRICKS &
ROUTINES. WILL GLADLY ASSIST
WITH ANY PROBS. I HAVE IM-5/50-1
& RSX.

TERRY LEADS, 27 BRYAN AVE
TWIN GROVE HTS, MINN 55875
I AM AN ANATEL PROSD OPERATOR
(KNOWMP). INTERESTED IN BUILDING
HARDWARE AND RL PROGRAMMING.

KRIS KERN, 418 BATES DR.
DAY VILLAGE, OHIO 44144
INVOLVED IN RUNNING SPORTS,ENJOY
ALL KINDS OF SPORTS. IN COMPUTER
NATH COURSE AT RS USING OSIRIDE
COMPUTERS. LIKE TO PROG AND
REMOTE PROGRAMS.

K C PYSKALATZKE, 76 BROWNWOOD BL
BOWLING,ONTARIO,CANADA,M7 1C1

ANDREW B MAIL, 2538 EVERGLADE DR
LAKE HAVAS CITY, ARIZONA 86403

DON SCHMIDT, 39 SCHOOL HOUSE RD
NEPEUNE, N.J. 07753
APPLICATION FORM/ANALYST BEL LAB
GEORGE F ROTTER,1815 ARLINGTON
LA GRANGE, ILL. 60525
ONLY WANTS CONTACT FROM THE CRE-
CIBO AREA.

RUNNIE HAMILTON, RTE 1 BOX 395
ABERDEEN, MISS 39730
I WORK FOR XEROX CORP AS A SERV
TECH. I AM INTO PROGRAMMING COM-
PUTERS. PLAN TO GO TO NIGHT SCH
FOR COMPUTER SCIENCE.

JOHN RACCIO, 24 VALLEY VIEW DR
MILFORD, CT 06452
VP/CM CRONIN ELECTRONICS. WE ARE
AN IND ELECT COMPONENT DIST. THE
APP IS USED AS A HOBBY & A TEACH
TOOL FOR MY 4 SONS.

FRED VAN DEYER,1015 ALPINE AVE
N.W., GRAND RAPIDS,MICH 49504

FRED WAGNER,1425 E CROFTON DR
LONDON, OHIO 43148
I WOULD LIKE TO GET IN TOUCH W/
OTHERS IN CENT OHIO.

JEFFREY LITLED, RTE 4 BOX 540
BARBROO, WISC 53953
WE LIVE ON A SMALL FARM IN SOUTH
CENT WISC. I'M INTERESTED IN
WRITING A PROGRAM FOR GENOLOGICAL
WORK, TO STORE & TO RETRIEVE
INFORM ON RELATIVES I AM LEARN-
ING ABOUT AS I SEARCH FOR MY
ROOTS.

MICHAEL WAGNER, 225 SUNSET DR
ATHENS, GEORGIA 30606
INTERESTED IN VIRTUALLY ALL
SOFTWARE & HARDWARE PROBS.

B E BROWN, 5425 E LOUISIANA
DENVER, COLO 80224

JOHN R GUNNY, RT 1 BOX 382
LINCOLN,NEBRASKA 68617
I WORK AS A SEMING MACHINE REPA-
IRMAN WITH RIEDEL TEXT. I ENJOY
THE IM-5.

DREG CRONS, 549 VARIEN,STAMFORD
CA 94305

I'M A SENIOR ON PHILOSOPHY AND
SOFTWARE ENG. ALTHOUGH I PREFER
TO PLAY WITH BIG MACH (DEC-20)
I EXPECT TO TINKER WITH MY NEW
IM-5.

BON BELTS, 26 N RIVERSIDE DR
WATKINSVILLE, MAINE 04981

BILL DE CON, COLUMBIA PLAZA
UNIV GARDENS, S.P. PUERTO RICO
00927

RALPH KIRKP, 82 1 HIGHLAND PK DR
COOPERSTOWN, PA 18027
I HAVE THE IM-5 WITH 16K AND
BIODATA 824 PRINTER. I AM A SYS
PROGRAMMER AT QUAKER ST OIL .

ERWIN S CEPKINSKI,1908 E SULLY DR
MILWAUKEE, WISC 53207
I AM A SENIOR COT, RETIRED FROM
MODEL MACHINE AT EATON CORP. I
ENJOY PROGRAMS & HOBBY ELECT.

KENNETH JACKSON, 2243 BERNIN SE
GRAND RAPIDS, MICH 49507
I AM A ELECTRONICS TECH FOR XERO
PACQUETBALL.

ANDRE BERGERON, PO BOX 93
CPS MONT APICA,QUEBEC,CANADA
H8A 2H0
I AM A TECH IN ELECTRO GEN SYS.
I WORK IN ELECT IN MY SPARE TIME
AS A HOBBY.

WYNEL P TAYLOR, RR 7 BOX 26
SHELBYVILLE, IND 46176
I AM A REDN ENG MAJOR WITH A
MINOR IN COMPUTER SCI.

STEPHEN SHIMMY, 12944 84 NETTLES
NEWPORT NEWS, VIR 23665
I HAVE A MS DEGREE IN PSYCHOLOGY
I AM INTERESTED IN EDUCATIONAL
PROGRAMS, GAMES, AS WELL AS NEWS
PSSC.

SEPHARD J SAMHERKY, PO BOX 334
NORWICH, PA 16379
AUTO MECH. ASSC. DEGREE IN ELECT
ENG TECH. FROM PENN ST. AND
HUNTER & FISHERMAN.

MARK SCHRIENER, 751 E LINCOLN
MILWAUKEE, WIS 53207
I LIKE TO PLAY FOOTBALL & BASE.
IN SCHOOL I LIKE COMPUTER SCI

JAMES FOSCOA, RT 5 BOX RD
JEFFERSON CITY, MO 65101
I AM A SYS PROG FOR WESTINGHOUSE
ELECT. WE HAVE AN IBM 4141.
I PRIMARILY WORK IN TELE COMM.
I AM A CHRISTIAN & WANT TO SET
UP SOME APPL. ON THE APP WHICH
WILL BE USEFUL TO MY CHURCH.

HEY FOLKS IT
WOULD BE A GOOD
IDEA TO SAY IF
YOUR PROGRAM IS
IN BASIC OR ML

WANTADS

FOR SALE: 3XK 1MS ADDITIONAL BY
INTERNAL PLUS RESET MICROPIE TO
INTERPIET BUT NOT CLEAR MEMORY.
PROD-GAME:TECHNICAL MANUAL,BASIC
TUTOR,CHECKBOOK/AR. NUMBER,
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5 GARS CONTINGUOUS. LIKE NEW-USED
ONLY 39 MILES. NEW PRICE \$25.00
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ROUTE 1 BOX 246-F AIRFRI, AL.
\$4854 AFTER SPN EST 240-376-3219
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"ELECTRONIC CHART OF ELEMENTS"
WH BK PROGRAM WHICH DISPLAYS THE
CHEMISTRY SYMBOLS OF THE FIRST
54 ELEMENTS ALONG W/ ITS NAME
ATOMIC #, & ATOMIC WT.
NEW TAPE...\$6.95 ON COMPUTER
TAPE...\$11.95 SEND CHECK OR MO
TO DRH TAYLOR, 500 #216,45W
MICHIO DRIVE, THPLKS, IN 46262
GET TO KNOW YOUR ID-2 METER.
5 INSTRUCTIONAL PROGRAMS PLUS A
CARD GANE FOR LETSUKE TIME.
POWER SUPPLY TUTOR,DIGITAL TUTOR
DORIAN & RED TUTOR & TRANSCOSTOR
TUTOR. INTERACTIVE & NO-NEED
ANIMATION. ALL 5 FOR \$14.95
P.N. PINNER 7304 LORENZO LN
LOUISVILLE, KY. 40228
!!!!THESE PROGRAMS WOULD BE
GOOD FOR SETTING A BASIC KNOW-
LEDGE OF DIGITAL ELECTRONICS....
WANT TO BUY FOR CASH,PERFORMERS
TAPE,DISCS ON OTHER APP 1
MATERIAL. CALL EVER.
212-434-8791 ON BOX 292,RODWOOD
STATION, BROOKLYN, NEW YORK 11223
HONOROR TREASUREUR GET THE
TREASURE WITHOUT HITTING A WALL
MYSTERY HANGS ON GO THROUGH THE
HANGS ON RED OUT ALIVE
\$6.95 EACH SEND MONEY ORDER TO
JAMES MILLER SOUV ON BOX 49
CLAVENROCK, NEW YORK

WOMEN FREQUENT ANALYSIS-----
ENTER ANY LIST OF NUMBERS OF 4
DIGITS OR LESS AND YOUR COMPUTER
KEEPS A RUNNING RECORD OF WHICH
DIGITS FALL WHERE AND HOW MANY
TIMES. SIVES TO TAPE, RECALLS
FROM TAPE. GREAT FOR LOTTERIES,
ANY LIST OF NUMBERS. SEND \$8.00
TO CARTON INSTRUMENTS, PO BOX
38, HODGSON HEIGHTS, N.C. 27007
SAX LETTER WRITER \$25.00 1002
OF 77 ENR/LINE, SML CASE PRINT
EASY EDIT-ADD, DEL, CHAN CHAP,
OR LINES. GAY & RED LETTERS
ON TAPE. PAGO. SPACE 39 LINES.
SEND CHECK: RILEY PERRY, 2000
ST MERIS ON RSC LONGWOOD, FL
32740
JAGOC TRACE. LINE NUMBERS ARE
DISPLAYED AS A BASIC PROGRAM
EXECUTES, ALLOWING YOU TO
FOLLOW THE LOGIC FLOW. THE
STEP OPTION ALLOWS YOU TO
MANUALLY STEP THRU A PROGRAM
ONE LINE AT A TIME. A BUILT
DEBUBING TOOL!! COST: \$15
CARL A. ECKOLS
112 CHEERIDE LAKE
MILLSVILLE, IN 46049
THIS PROGRAM IS EASY TO USE AND
UNDERSTAND AND COULD BE A GOOD
ADD IN DEBUBING PROGRAMS
PAINT FIGHT-A GAME OF LUCK AND
STRATEGY THAT PUTS YOU AND AN
OPPONENT IN A RACE TO BE THE
FIRST TO DISCOVER AND PAINT
EACH OTHERS LOCATION.
CASSETTE \$5.95 SEND CHECK OR MO
TO JOE JONES, RT 4 BOX 244
COFFEYVILLE, KANSAS 67337
CONCENTRATION, NEW-ENTER AND
NINTHOUR. 9.95 STAR TRED 12.95
OR ALL FOUR GIVE FOR 19.95
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PER EXTRA VERSION (SPECIFY BK OR
SAX & 32 OR 64 CHAR. PER LINED
G.A. JONES 419 R 185 E PL.
TULSA, OKLAHOMA 74120
THE LINE PROCESSOR IS THE ONE WE
ARE USING NOW TO DO THE CLUB
NEWSLETTER. ALSO THE GAMES ARE
IN BASIC BUT THEY DO PLAY WELL,
BE READY TO STAY AWAKE TO MEAT
STAR TREK.....THE EDITOR

HALEY SUPERCALC 2.5 KBYTE MACHINE
LAND LOCATED AT RIBBY. ALL CAS-
SETTE ORDERS INCL. ROM TO MOVE TO
OTHER MEMORY LOC , 5 PROGRAM-
ABLE CONSTANTS & 3 SUBROUTINES,
TO 1000'S OF 40 FUNCTION PHOES.
19 PB. NUMBER AVAILABLE FOR FULL
DETAILS OF HALEY. JAN PRICES GOOD
UNTIL APRIL 30. PRICES AFTER MAY
1ST CASSETTE/1 PS MINIMAL 40P,
CASSETTE/ 19 PS MINIMAL 42P. NEW
ROMROM RECOMMENDED FOR INTERRUPT
99K. WORKS WITH ALL WFF MODES.
PERFORMS UP TO 99 COMPLEX MATH
FUNCTIONS WITH JUST 1 KEY. SEND
CHECKS AND TRACES TO KEITH
PHILLIPS, 3463 HILLSBOROUGH WAY,
SAN JOSE, CAL. 95121
THIS PROGRAM WOULD BE HANDY FOR
THOSE PROGRAMERS READING HIGHER
MATH ABILITIES NOW. AS FAR AS MY
LIMITED MATH ABILITY CAN CHECK
IT IS OK.....EDITOR
NEW FOLKS CHECK OUT THE GAMES IN
THE FULL PAGE ADS. THE PAC MAN
AND PROMY ARE BOTH VERY GOOD
GAMES WITH SOME REAL GOOD AI RES
GRAPHICS. YOU SHOULD ENJOY BOTH!
THE RESION IMPROBABLE IS A VERY
EXCITING GORE. IT IS ON LAN RES
BUT IT IS DONE VERY WELL AND IS
HARD TO BEAT!!!!!!EDITOR!!

MISSION:IMPROBABLE

NEW!

- 7 Different Screens of Various Color (6 Play 1 Display)
- 3 Separate Missions-Reconnaissance-Sabotage-Assassination
- 13 Scoring Categories
- 4 Skill Levels (A "Thinkers" Game)
- Instructions for Each Mission Included in Program
- Top Scoring for Competition!

OPERATION
'ALPHA'

Move throughout an enemy island outpost avoiding machine guns and a roving guard. Take orders from headquarters. Wipe out enemy guards, V.I.P.s and police. Tunnel underground. Plant bombs. Search for an Enemy Commandant in a dark cellar using sonar and laser powered flashlight. Photograph secret documents locked in a vault. Make your way through a dangerous mine field to the other side of the island and rendezvous with an escape submarine or lower the missile battery and escape through the harbor. Even elect to be "buried at sea" (for those who don't make it!) This adventure packed program is thought provoking, challenging, and fun for the entire family! You'll enjoy the "far from Broadway" theatrical opening with its cast of characters, curtain call, and musical introduction. All this, along with the action and intrigue of each selected mission makes "Operation Alpha" a good variety program at a very reasonable price. 16K program includes pre-programmed tape with sound track recorded in synthesized sound and a 21-page detailed instruction booklet. EASILY A \$30 VALUE....ONLY \$14.95 ppd.

NEW!

- 3 Different Graphic Screens of Various Color
- 4 Time Decrement Missions
- Bonus Scoring for Mission Difficulty
- Top Scoring for Competition

OPERATION
'BRAVO'

A deadly virus has hit an enemy island. Your mission is to wipe out the enemy camp of infected guards before their government carries out their fiendish plan! Tunnel underground. Zap the guards. Plant a bomb. Escape through a minefield or harbor. Lower missile battery and make it to the waiting submarine before time runs out! Note: Operation "Bravo" is an excerpt from Operation "Alpha" and utilizes the "Sabotage" mission in a modified 8K version. The program is similar, but the main control layout is different, as well as the scoring technique used. 8K program with color, sound, and graphics, ONLY \$10.95 (includes 8-page instruction booklet) ppd.

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- ☐ BOTH PROGRAMS \$21.95

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ADDRESS _____

CITY _____

STATE _____

ZIP _____

Personal check/M.O. OK
Overseas add \$2.00 sh/hd1g.

Mission Improbable

OPERATION
'ALPHA'

**NEW
NEW
NEW
NEW
NEW**

OPERATION
'BETA'



GEO-GRAFIX LTD.

-FROGGY ON THE FREEWAY-



If you like highspeed thrills and excitement, you'll love FROGGY ON THE FREEWAY!! A colorful, HI-RES, quick action game is finally here. You control a little frog across a 10 lane freeway to his home. Each time you get a frog home the traffic gets faster. Get 4 home and you advance to the GOLD frog level, this ones really tough! And if your real good you'll make it to the 3rd level, (RED FROG). This levels a killer. Frog may eat snakes and flies for bonus points. It's mile a minute action will provide hours of challenging fun.

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INCLUDES 14888 BYTES ROM WITH BASIC BUILT IN, 9000 BYTES USER RAM, COLOR, SOUND, PROFESSIONAL 55 KEYBOARD, 2 GAME CONTROLLERS, 2 1/4 KEY MINIDISK PAGES, HIGH SPEED CASSETTE, A.C. ADAPTER, R.F. MODULATOR, T.V. SWITCH BOX, ACCEPTS TAPE-DISK-PLUS IN CARTRIDGES IT IS PLUS IN EXCHANGEABLE, 96 DAYS PARTS AND LABOR WARRANTY, OWNERS GUIDE, BASIC LANGUAGE MANUAL, BEAUTIFUL BLACK & WHITE COMSOLE.

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ALL ORDERS WILL BE EITHER PREPAID WITH CHECK OR MONEY ORDER OR THEY WILL BE SHIPPED COD.

1 = \$15.99 SHIPPING + \$3.99 C.O.D. 25 = \$10.99 SHIPPING + \$5.99 C.O.D.

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ALL ITEMS SUBJECT TO AVAILABILITY.

FIRST COME FIRST SERVE ON ALL ORDERS.

HEY! WE HAVE A PRINTER AVAILABLE NOW. WE DID NOT GET THE INFO
SOON ENOUGH FOR THIS LETTER SO IF YOU ARE INTERESTED PLEASE
WRITE TO US.
ALL HARDWARE AND GAME CARTRIDGES ARE IN LIMITED QUANTITIES SO
FIRST COME FIRST SERVE. PLEASE ALLOW 4 TO 6 WEEKS DELIVERY. ALL
ORDERS ARE EITHER PREPAID OR COD. PLEASE SEND ORDERS TO:::
M B ENTERPRISES, P.O.BOX 1411, SPRINGDALE, ARK 72764...

NEW MEMBER APPLICATION OR ORDER FORM.

NAME-----

ADDRESS-----

CITY-----

STATE & ZIP-----

ALL NEW MEMBERS GET \$5.00 CREDIT TOWARD ANY PURCHASE. MEMBERSHIP
FEE IS \$15.00 AND ALL PREVIOUS LETTERS FOR 1983 WILL BE SENT.

IM-1 IN A MILLION
PO BOX 1411
SPRINGDALE
ARK 72764



IF YOU HAVE SOLD YOUR IM-1 PLEASE
FORWARD THIS MEMO LETTER TO THE
NEW OWNER.